

What is claimed is:

1. A method for mirroring data using two controllers in a storage system, comprising:

providing a message that includes metadata by a first controller to a second controller and in which said message including said metadata is not greater than 128 bits, with said

5 message being part of a first mirroring operation; and

continuing with said first mirroring operation after said providing step.

2. A method, as claimed in Claim 1, wherein:

said providing step includes determining that data associated with said first mirroring operation is not greater than a predetermined number of bytes.

3. A method, as claimed in Claim 2, wherein:

said determining step includes ascertaining by said first controller that said data associated with said first mirroring operation is no greater than 32 Kbytes.

4. A method, as claimed in Claim 2, wherein:

said first controller communicates with a second controller using a Small Computer System Interface (SCSI) protocol and in which said predetermined number of bits in said message relates to said Small Computer System Interface (SCSI) protocol.

5. A method, as claimed in Claim 2, wherein:

said continuing step includes sending said second controller a second message that includes said data.

6. A method, as claimed in Claim 5, wherein:

said continuing step includes sending a write complete message related to completion of said first mirroring operation.

7. A method, as claimed in Claim 1, further comprising:

determining that second data associated with a second mirroring operation has a greater number of bits than a predetermined number of bits and sending a second message to said second controller that does not include metadata.

8. A method, as claimed in Claim 1, wherein:

said message is the first message sent by said first controller to said second controller for said first mirroring operation.

9. A method, as claimed in Claim 1, wherein:

said message causes a first interrupt to said second controller and the minimum number of interrupts to said second controller for said first mirroring operation is three interrupts.

10. A method for mirroring using two controllers in a storage system, comprising:  
making a determination related to contents of a message to be sent by a first  
controller to a second controller as part of a first mirroring operation; and  
producing said message having contents that depends on said making step wherein,  
5 when said making step determines that data to be sent is less than or equal to predetermined  
number of bits, said message includes metadata and when said making step determines that  
said data is greater than said predetermined number of bits, at least less than all said metadata  
associated with said first mirroring operation is not included with said first message.

11. A method, as claimed in Claim 10, further comprising:  
sending said message to said second controller and recognizing said message by said  
second controller including whether said message includes said metadata.

12. A method, as claimed in Claim 10, wherein:  
said message is the first message sent by said first controller to said second controller  
as part of said first mirroring operation.

13. A method, as claimed in Claim 10, wherein:  
said message causes a first interrupt to said second controller when said first message  
includes said metadata, with said first interrupt being one of three interrupts and said three  
interrupts being the minimum number of interrupts for said first mirroring operation.

14. A method, as claimed in Claim 10, wherein:

said first controller communicates with said second controller for said first mirroring operation using Small Computer System Interface (SCSI) protocol and said predetermined number of bits depends on SCSI protocol operations.

15. An apparatus for mirroring data using two controllers in a storage system, comprising:

a first controller that generates one of a first message and a second message depending on an amount of data to be sent by said first controller as part of a first mirroring operation; and

a second controller that receives said data from said first controller.

16. An apparatus, as claimed in Claim 15, wherein:

said first message includes all metadata for said first mirroring operation and said second message includes at least less than all said metadata for said first mirroring operation and in which said one of said first message and said second message is the first communication from said first controller to said second controller for said first mirroring operation.

17. An apparatus, as claimed in Claim 15, wherein:

said first message includes metadata and the number of bits in said first message relates to SCSI protocol.

18. An apparatus, as claimed in Claim 15, wherein:

said first message includes metadata and command related information and said first message is no greater than 128 bits.

19. An apparatus, as claimed in Claim 15, wherein:

when said second message is generated, metadata is sent to said second controller after an interrupt that is different from the interrupt associated with said second message.

20. An apparatus, as claimed in Claim 15, wherein:

when said first message is generated, said first mirroring operation is associated with a first number of interrupts and, when said second message is sent, said first mirroring operation is associated with a second number of interrupts, with said second number of interrupts being greater than said first number of interrupts.